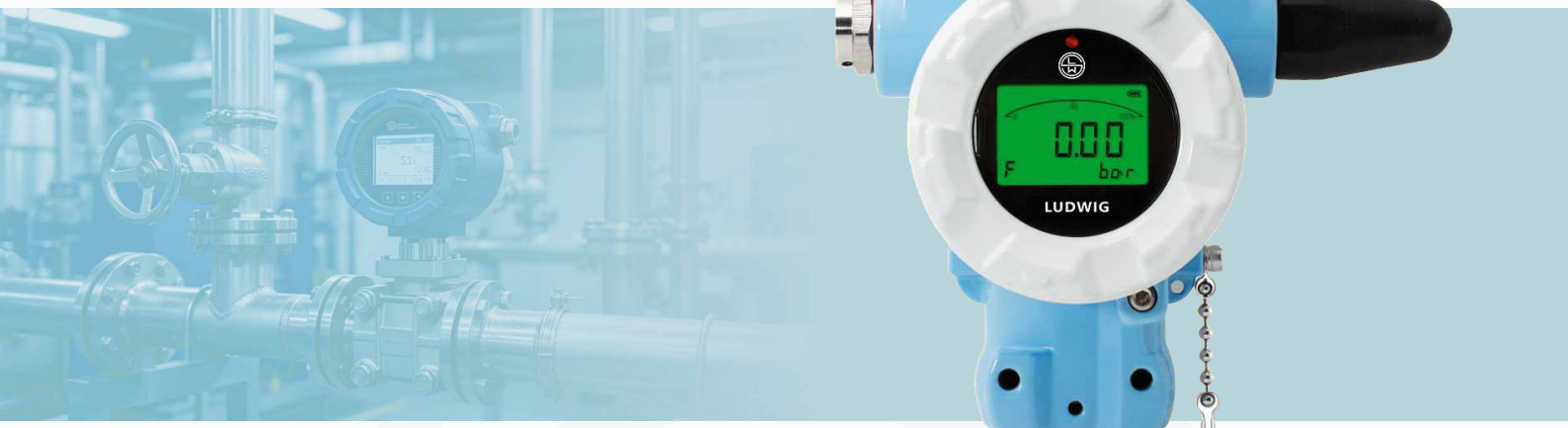
For detailed selection, refer to page 5



SP10-5
Wireless pressure transmitter

Product description

The SP10-5 wireless pressure transmitter is a high-precision intelligent instrument powered by lithium-ion batteries and equipped with wireless communication function. The main application area of this product is pressure monitoring for outdoor or inconvenient power supply environments, such as oil, gas, heating, etc. It sends pressure, alarm and other data to the data center through wireless networks. This product adopts a low-power design and is equipped with a high-precision pressure sensor. It has functions such as power on/off, reset, data storage, upper and lower limit alarms, threshold alarms, etc. It supports local Bluetooth parameter settings, firmware upgrades, and data export.

This product has multiple wireless transmission modes of NB IoT/4G, and can be powered by batteries or power sources to meet the different needs of users.

Working principle

The wireless pressure transmitter adopts wireless transmission technology, which does not require wiring and is easy to install, suitable for pressure monitoring scenarios in multiple industries. Widely used in fields such as petrochemicals, municipal water supply and drainage, gas pipelines, HVAC, water conservancy and water management, and sewage treatment. It can be used for real-time pressure collection and remote monitoring of pipeline pressure, tank containers, hydraulic and pneumatic equipment, boiler pressure vessels, mining pipeline networks, and building water supply systems. It is also suitable for working conditions such as unmanned operation in the field, scattered measurement points, and complex wiring difficulties, achieving wireless data upload and assisting in intelligent monitoring, safe operation and maintenance, and digital management.

Features

The core of the wireless pressure transmitter has precise pressure acquisition and wireless transmission functions, equipped with high-precision pressure sensors, small measurement errors, rapid response, and can capture pressure changes in real time. Support wireless long-distance transmission, no need for complex wiring, suitable for difficult wiring scenarios. Equipped with high-definition digital display, pressure data is intuitive and visible, supporting parameter calibration, alarm setting, and automatic overpressure warning. The whole machine is waterproof, dustproof, anti-interference, resistant to high and low temperatures, suitable for harsh working conditions, capable of remote real-time monitoring and data storage, low-power design with long-lasting endurance, easy installation, and helps with intelligent operation and digital pressure monitoring of equipment.

✆ 400-860-9760

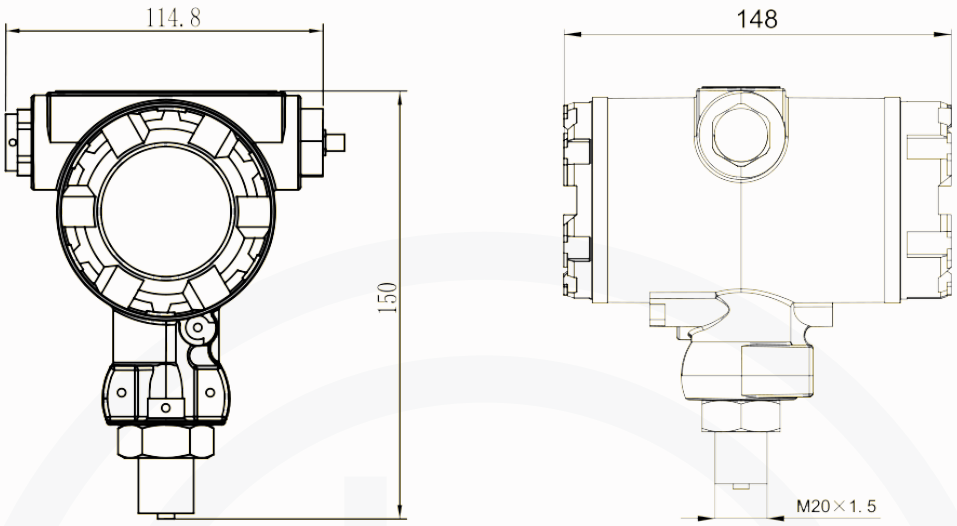
For more product information, please visit www.ludwig-schneider.com.cn

LUDWIG
INSTRUMENT

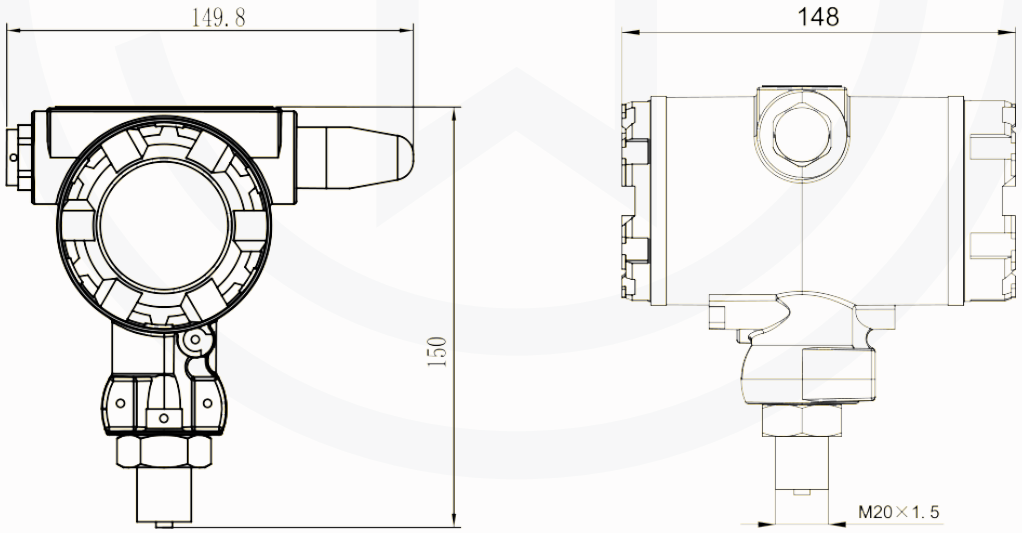
Technical Specifications

Technical Name	Parameter
Pressure range	-100KPa...0~ 5kPa...60MPa
Precision	+0.5%F.S (-100KPa...0~ 5kPa...60MPa)
	+0.25%F.S (-100KPa...0 ~ 10kPa...60MPa)
Overload pressure	1.5 times rated pressure
Forms of pressure	Gauge pressure G/Absolute pressure A
Measured medium	Gas or liquid compatible with 304316L stainless steel, fluororubber, or nitrile rubber
Operating Temperature	-20°C~70°C
Storage temperature	-40°C~85°C(battery-free)
Power supply	NB-IoT:3.6V@19Ah(Disposable lithium-ion battery) 4G:3.6V@19Ah(Disposable lithium-ion battery)/10~30VDC
Power consumption	Send average current≤100mA@3.6VDC; Quiescent current≤20uA@3.6VDC;
Pressure interface	M20x1.5,G1/2,G1/4,etc
Contact method	NB-IoT/4G
Communication protocol	MQTT
Communication frequency band	NB-IoT:B5/B8,4G:Full Netcom
SIM card	Nano SIM (12.3mmx8.8mmx0.67mm)
Antenna type	Built in horn antenna/external suction cup antenna
Configuration method	Local Bluetooth
Button	Non contact panel interaction
Sampling period	Adjustable from 10 to 600 seconds, default is 60 seconds
Reporting cycle	Adjustable from 1 to 1440 minutes, default is 120 minutes
Pressure Alarm	Pressure upper limit, lower limit, and dynamic change threshold can be set
Protection level	IP65
Weight	≈1.4kg

Overall dimensions

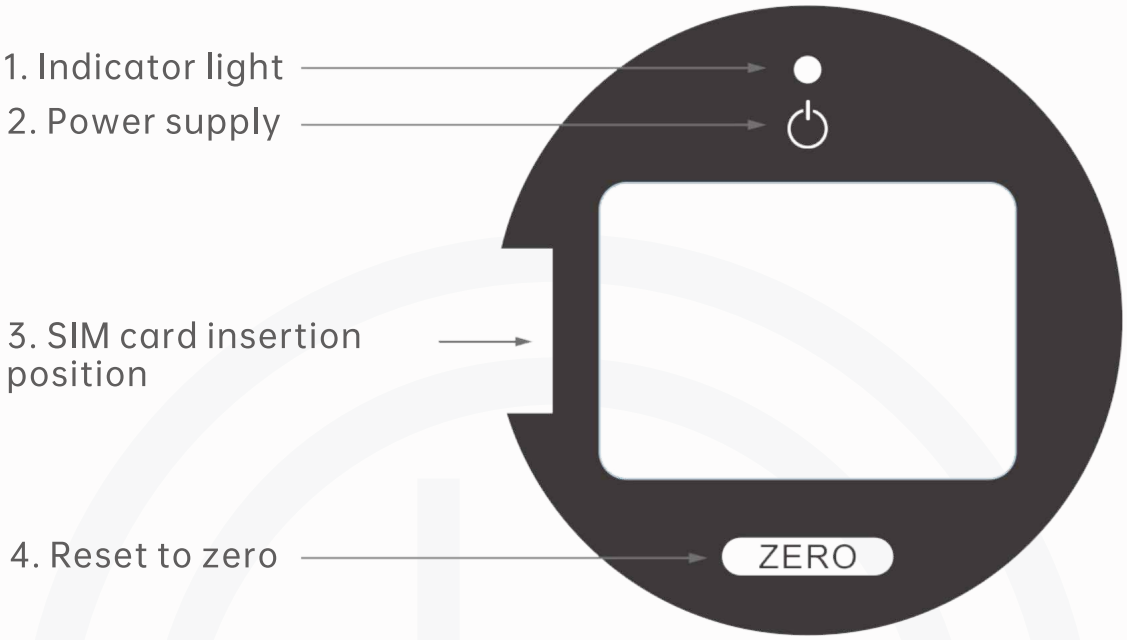


External antenna model

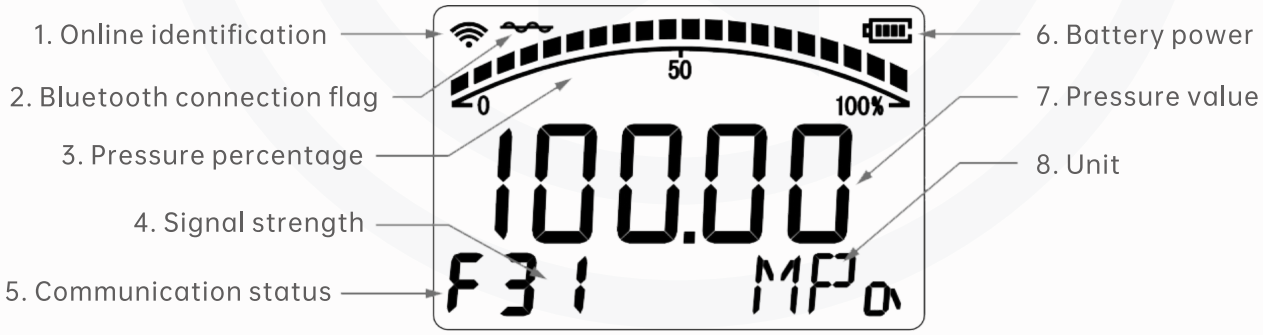


Built in antenna model

Panel indication



Display instructions



✆ 400-860-9760

For more product information, please visit www.ludwig-schneider.com.cn

Wireless Pressure Transmitter - Model Selection and Configuration

Example Of Selection **SP10-5** A / C / E / G / Q (1 2 3 4 5)

1.Precision	A	+0.5%F.S (-100KPa...0~ 5kPa...60MPa)	
	B	+0.25%F.S (-100KPa...0 ~ 10kPa...60MPa)	
2.Forms of pressure	C	Gauge pressure G	
	D	Absolute pressure A	
3.Power supply	E	NB-IoT:3.6V@19Ah(Disposable lithium-ion battery)	
	F	4G:3.6V@19Ah(Disposable lithium-ion battery)/10~30VDC	
4.Pressure interface	G	M20x1.5	
	H	G1/2	
	J	G1/4	
	T( )	Other interfaces	
5.Contact method	Q	NB-IoT	
	R	4G	

Explanation:

SP10-5 wireless pressure transmitter, with an accuracy of+0.5% F.S (-100KPa... 0~5kPa... 60MPa), pressure form is gauge pressure G, and power supply mode is NB IoT: 3.6V@19Ah (Disposable lithium-ion battery), pressure interface M20x1.5, communication method NB IoT.

Product Certification

Compliance and approval; The Ludwig water quality analyzer meets key standards and certifications for process measurement technology; To ensure the highest reliability in such settings;

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